

REMARKS

Claims 1-20 are pending in this application. Claims 1-20 are rejected. Claims 1, 8, 11 and 17 are herein amended. Attached hereto is a marked-up version of the changes made by the current amendment, captioned "Version with Markings to Show Changes Made."

Claims Rejections under 35 U.S.C. §102(b)

Claims 1-10 remain rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,912,913 to Kondow et al.

In response thereto, Applicants herein amend independent claim 1 to more clearly indicate that "said dielectric film contains a nitride ~~on the side of the interface between said dielectric film and~~ formed directly on the surface of said nitride-based semiconductor layer while containing an oxide ~~on the side opposite to said nitride-based semiconductor layer~~ formed on said nitride." Claim 8 is similarly amended to recite that "said dielectric film contains a compound containing nitrogen and oxygen ~~on the side of the interface between said dielectric film and~~ formed directly on the surface of said nitride-based semiconductor layer while containing an oxide ~~on the side opposite to said nitride-based semiconductor layer~~ formed on said compound." Applicants submit that these amendments clarify the claims, and emphasize that the claims, as herein amended, are neither taught or suggested by the cited references.

Claim 17 is rejected under 35 U.S.C. §102(b) as being anticipated by Inoguchi et al. (JP-09-289358).

The Examiner appears to not have considered the previously submitted argument with respect to claim 17 as being anticipated by Inoguchi et al. Applicants further amend claim 17, and

subsequently disagree with this rejection, because not all of the claim elements appear to be taught in this reference. Claim 17 is herein amended to emphasize that “said ridge portion has a side surface having a step formed between a side surface of said projection portion of said cladding layer and a side surface of said layer formed on said projection portion”. Applicants respectfully submit that this amendment clarifies the distinctions between the claimed invention and that of the cited references.

Claim Rejections under 35 U.S.C. §103(a)

Claims 11-13 are rejected under 35 U.S.C. §103(a) as being unpatentable over Kondow et al. as applied to claims 1-10 above, and further in view of U.S. Patent No. 5,838,705 to Shieh et al. Claims 1, 14-16 and 18-20 are rejected under 35 U.S.C. §103(a) as being unpatentable over Inoguchi as applied to claim 17 above, and further in view of Shieh et al.

The Examiner disagrees that “directly” must be read into the claim and further disagrees that Applicants are claiming that the nitride film is formed directly on the surface of the nitride-based semiconductor layer. The Examiner notes that the claim, as currently presented, does not require that the dielectric film containing a nitride directly at the interface.

Therefore, Applicants herein amend independent claims 1 and 11 to more clearly indicate that “said dielectric film contains a nitride ~~on the side of the interface between said dielectric film and~~ formed directly on the surface of said nitride-based semiconductor layer while containing an oxide ~~on the side opposite to said nitride-based semiconductor layer~~ formed on said nitride.” Claim 8 is similarly amended to recite that “said dielectric film contains a compound containing nitrogen and oxygen ~~on the side of the interface between said dielectric film and~~ formed directly on the surface

Response under 37 C.F.R. §1.116
Yasuhiko NOMURA et al.

U.S. Patent Application Serial No. 09/666,553
Attorney Docket No. 001222

of said nitride-based semiconductor layer while containing an oxide ~~on the side opposite to said~~
~~nitride-based semiconductor layer~~ formed on said compound." Applicants submit that these
amendments clarify the claims, and emphasize that the claims, as herein amended, are neither taught
or suggested by the cited references.


For at least the above reasons, Applicants submit that the claimed invention, as herein
amended, patentably distinguishes over the cited references. Applicants earnestly request withdrawal
of the rejections and passage of the claims to issue.

If the Examiner believes that this application is not now in condition for allowance, the
Examiner is requested to contact Applicants' undersigned attorney at the telephone number indicated
below to arrange for an interview to expedite the disposition of this case.

In the event that this paper is not timely filed, Applicant respectfully petitions for an
appropriate extension of time. The Commissioner is authorized to charge any fees that may be due
with respect to this paper to Deposit Account No. 01-2340.

Respectfully submitted,

ARMSTRONG, WESTERMAN & HATTORI, LLP


Kenneth H. Salen
Attorney for Applicants
Reg. No. 43,077

KHS/plb
Atty. Docket No. **001222**
Suite 1000, 1725 K Street, N.W.
Washington, D.C. 20006
(202) 659-2930



23850

PATENT TRADEMARK OFFICE

Enclosures: Version with Markings to Show Changes Made

Q:\FLOATERS\KHS\00\001222\001222 Amend 4-7-03.wpd

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

Please amend claims 1, 8, 11 and 17 as follows:

1. (Amended) A semiconductor light emitting device comprising:

a nitride-based semiconductor layer including an emission layer; and
a dielectric film formed on the surface of said nitride-based semiconductor layer, wherein
said dielectric film contains a nitride ~~on the side of the interface between said dielectric~~
~~film and~~ formed directly on the surface of said nitride-based semiconductor layer while
containing an oxide ~~on the side opposite to said nitride-based semiconductor layer~~ formed on
said nitride.

8. (Amended) A semiconductor light emitting device comprising:

a nitride-based semiconductor layer including an emission layer; and
a dielectric film formed on the surface of said nitride-based semiconductor layer, wherein
said dielectric film contains a compound containing nitrogen and oxygen ~~on the side of~~
~~the interface between said dielectric film and~~ formed directly on the surface of said nitride-based
semiconductor layer while containing an oxide ~~on the side opposite to said nitride-based~~
~~semiconductor layer~~ formed on said compound.

11. (Amended) A semiconductor light emitting device comprising:

a nitride-based semiconductor layer including an emission layer; and

a dielectric film formed on the surface of said nitride-based semiconductor layer, wherein said dielectric film contains a nitride ~~on the side of the interface between said dielectric film and~~ formed directly on the surface of said nitride-based semiconductor layer while containing a compound containing nitrogen and oxygen ~~on the side opposite to said nitride-based semiconductor layer~~ formed on said nitride.

17. (Twice amended) A semiconductor light emitting device comprising:

an emission layer composed of a nitride-based semiconductor;

a cladding layer, formed on said emission layer, composed of a nitride-based semiconductor having a flat portion and a projection portion located on said flat portion; and

a layer of nitride-based semiconductor formed on said projection portion, wherein

said projection portion of said cladding layer and said layer formed on said projection portion form a ridge portion, and

said ridge portion has a side surface having a step formed between a side surface of said projection portion of said cladding layer and a side surface of said layer formed on said projection portion;

said semiconductor light emitting device further comprising a dielectric film formed on said flat portion of said cladding layer and the side surface of said ridge portion.